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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/394,097	09/13/1999	PAUL JOSEPH DAVIS	DAVIS 11-16-8	3702

7590 09/22/2005

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EXAMINER

SING, SIMON P

ART UNIT	PAPER NUMBER
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2645

DATE MAILED: 09/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/394,097

Applicant(s)

DAVIS ET AL.

Examiner

Simon Sing

Art Unit

2645

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li US 5,646,990 in view of Sacca US 5,692,042.

1.1 Regarding claim 1, Li discloses a full-duplex speakerphone in figures 1 and 2 (column 4, lines 62-67; column 5, lines 1-10; column 6, lines 11-28), comprising:

a microphone signal from microphone 210 (column 6, lines 29-33);

a loudspeaker 236;

gain modules 212 and 240 (figure 2); and

a summer 220 (figure 2).

Li fails to teach injecting a message playback signal into the speakerphone.

However, Sacca discloses a voice messaging system with speakerphone capability in figure 1 (column 7, lines 23-51). Sacca teaches injecting a tape playback message from a telephone answering device via switch 118 into a receiving path at the input of speaker amplifier 120, and then to a transmitting path at the input of line

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amplifier 142 for transmitting to a far end party in a speakerphone mode (column 8, lines 7-14, 26-53).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Li's reference with the teaching of Sacca so that the speakerphone of Li would have been connected to a tape playback module, such as a telephone answering device, and summing a pre-recorded message at a summer at the input of speaker amplifier 234 and at another summer at the input of line amplifier 270, so that a far end party would have been able to converse with a near end party and to hear a playback message at the same time, because such a modification would have enabled a near end user to play a pre-record a message to a far end party during a telephone conversation.

1.2 Regarding claim 2, it is inherent that a playback module has an amplifier in its signal output path.

1.3 Regarding claim 3, Li teaches a fixed gain amplifier 212 and an automatic gain control (AGC) 240, and it is a matter of design choice to have two amplifiers, a fixed gain and a variable gain, instead of one gain module in a signal path.

1.4 Regarding claim 4, Li teaches a fixed gain amplifier 212 and an automatic gain control (AGC) 240 (figure 2).

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1.5 Regarding claim 5, Li teaches switched gain/loss modules 250 and 251 (column 7, lines 6-11).

1.6 Regarding claim 6, as discussed in claim 1, the modified Li reference teaches that the playback message is injected at a summer at the input of line amplifier 270.

1.7 Regarding claim 7, Li teaches a digital to analog converter (D/A) 256 in figure 2.

1.8 Regarding claim 8, Li teaches a Tx speech detector 224 (figure 2; column 7, lines 1-6).

1.9 Regarding claim 9, as discussed in claim 1, the modified Li's reference comprises a a telephone answering device (for message playback).

1.10 Regarding claims 10 and 15, Li discloses a full-duplex speakerphone in figures 1 and 2 (column 4, lines 62-67; column 5, lines 1-20; column 6, lines 11-28), comprising:

means for establishing a connection with a far end party for a telephone conversation in a full-duplex speakerphone mode (column 4, lines 62-66); and

means for generating a microphone signal (column 4, lines 67 to column 5, line 9); and

Li fails to teach injecting a message playback signal into the speakerphone.

However, Sacca discloses a voice messaging system with speakerphone capability in figure 1 (column 7, lines 23-51). Sacca teaches injecting a tape playback

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message from a telephone answering device via switch 118 into a receiving path at the input of speaker amplifier 120, and then to a transmitting path at the input of line amplifier 142 for transmitting to a far end party in a speakerphone mode (column 8, lines 7-14, 26-53).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Li's reference with the teaching of Sacca so that the speakerphone of Li would have been connected to a tape playback module, such as a telephone answering device, and summing a pre-recorded message at a summer at the input of speaker amplifier 234 and at another summer at the input of line amplifier 270, so that a far end party would have been able to converse with a near end party and to hear a playback message at the same time, because such a modification would have enabled a near end user to play a pre-record a message to a far end party during a telephone conversation.

1.11 Regarding claim 11 and 16, Li teaches an AGC 240 for adjusting the signal level of microphone 210.

1.12 Regarding claim 12 and 17, it is inherent that a tape player has a gain control circuitry, such as volume control for controlling its output signal level.

1.13 Regarding claims 13 and 18, the modified Li reference, teaches injecting the play message at the input of line amplifier 270, such that the AGC 240 is unable to adjust the

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signal level of both microphone 210 and the playback message. However, it is obvious to a circuit designer such that the playback message can be injected at a point before (for analog signal) or after the A/D 216 (for digital signal) as a design choice.

1.14 Regarding claim 14 and 19, as discussed before, the playback message is injected at a summer at the input of line amplifier 270 which is after the AGC 240.

Response to Arguments

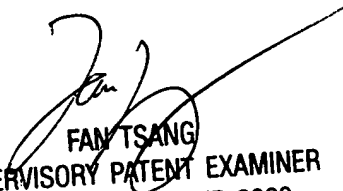
2. Applicant's arguments with respect to claims 1-19 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

3. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Simon Sing whose telephone number is 571-272-7545. The examiner can normally be reached on Monday - Friday from 8:30 AM to 5:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang, can be reached at 571-272-7547. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2600.

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FAN TSANG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600



S. Sing

09/16/2005